Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A securing process for an electronic system using a cryptographic calculation procedure that uses a secret key, ~~characterized in that it consists of~~ comprising: masking intermediate results in input or output of at least one critical function of the said procedure so that the critical function respectively gives in output or receives in input non-masked intermediate results.

2. (currently amended) The process according to claim 1, ~~characterized in that~~further comprising a replacement function for a critical function of the said procedure making the same calculation but with results masked in input or output.

3. (currently amended) The process according to claim 1 or 2, ~~characterized in that~~ further comprising sequencing replacement functions so as to give non-masked results for input and output of the said procedure.

4. (currently amended) The process according to ~~one of the claims 1, 2, or 3, characterized in that~~ claim 1 or 2, further comprising using different masks according to the critical functions concerned.

5. (currently amended) The process according to claim 2, ~~characterized in that~~ wherein the replacement function on results masked for input is built based on the following operations:

- an operation of masking that is not public;
- an operation making the same calculation as the critical function but with results masked using the masking function.

6. (currently amended) The process according to claim 2, ~~characterized in that~~ wherein the replacement function on data masked in output is built based on the following operations:

- an operation making the same calculation as the critical function but on results that must be masked by the masking function;
- a non-public masking function.

7. (currently amended) The process according to ~~one of the claims~~claim 5 or 6, ~~characterized in that it consists of~~ further comprising sequencing the operations of the masking function in a random manner.

8. (currently amended) An electronic system comprising means to store a cryptographic calculation procedure that uses a secret key, means to carry out the said calculation procedure ~~characterized in that it comprises~~ comprising means of masking intermediate results in input or output of at least a critical function of the said procedure so that the critical function respectively gives in output or receives in input non-masked intermediate results.

9. (currently amended) An electronic system according to claim 8, ~~characterized in that~~ wherein the masking means for intermediate results and calculation according to the critical function but with the said results masked are made of an S-box.

10. (Cancelled)

11. (new) A process according to claim 3, comprising using different masks according to the critical functions concerned.

12. (new) A computer storage media operable to store instructions for instructing a processor of an electronic system to perform certain operations, the storage media comprising:

instructions to direct the processor to execute steps of a securing process using a cryptographic calculation procedure that uses a secret key, comprising instruction for masking intermediate results in input or output of at least one critical function of the said procedure so that the critical function respectively gives in output or receives in input non-masked intermediate results.

13. (new) The computer storage media according to claim 12, further comprising instructions to direct the processor to execute a replacement function for a critical function of the said procedure making the same calculation but with results masked in input or output.

14. (new) The computer storage media according to claim 12 or 13, further comprising instructions to direct the processor to sequence replacement functions so as to give non-masked results for input and output of the said procedure.

15. (new) The computer storage media according to claim 12 or 13 further comprising instructions to direct the processor to use different masks according to the critical functions concerned.

16. (new) The computer storage media according to claim 14 further comprising instructions to direct the processor to use different masks according to the critical functions concerned.

17. (new) The computer storage media according to Claim 13 wherein the replacement function on results masked for input is built based on the following operations:

- an operation of masking that is not public;
- an operation making the same calculation as the critical function but with results masked using the masking function.

18. (new) The computer storage media according to claim 13, wherein the replacement function on data masked in output is built based on the following operations:

- an operation making the same calculation as the critical function but on results that must be masked by the masking function;
- a non-public masking function.

19. (new) The computer storage media according to claim 17 or 18, further comprising instruction to cause sequencing of the operations of the masking function in a random manner.